(FILE 'REGISTRY' ENTERED AT 11:52:13 ON 08 NOV 2004)

L34

STR

NODE ATTRIBUTES:

NSPEC IS RC AT 8
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L35 STR

NODE ATTRIBUTES:

NSPEC IS RC AT 8
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 12

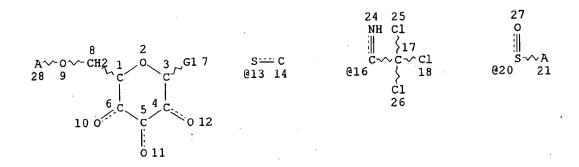
STEREO ATTRIBUTES: NONE

L36

299043 SEA FILE=REGISTRY SSS FUL L34 OR L35

L94

STR



0~~C @22 23

VAR G1=13/16/20/X/22
NODE ATTRIBUTES:
NSPEC IS RC AT 14
NSPEC IS RC AT 21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L95 48207 SEA FILE=REGISTRY SUB=L36 SSS FUL L94

100.0% PROCESSED 177879 ITERATIONS

48207 ANSWERS

SEARCH TIME: 00.00.02

(FILE 'CAPLUS' ENTERED AT 11:53:02 ON 08 NOV 2004)

L96 17261 SEA ABB=ON PLU=ON L95

L97 10615 SEA ABB=ON PLU=ON L96(L)(SPN OR PREP?)/RL

L99 616 SEA ABB=ON PLU=ON L97(L) (OLIGOSACCHARIDE OR OLIGO SACCHARIDE

OR NEOGLYCOCONJUGATE OR GLYCOCONJUGATE OR (NEOGLYCO OR

GLYCO) (W) CONJUGATE)

L101 9 SEA ABB=ON PLU=ON L99(L)BUILD? BLOCK

E1 THROUGH E91 ASSIGNED

TITLE:

L101 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 23 Oct 2002

ACCESSION NUMBER: 2002:803363 CAPLUS

DOCUMENT NUMBER: 138:24924

An Orthogonally Protected α, α -

Bis $(aminomethyl)-\beta-alanine$ Building Block for the Construction of Glycoconjugates on a Solid Support

Katajisto, Johanna; Karskela, Tuomas; Heinonen, Petri; AUTHOR(S): Loennberg, Harri Department of Chemistry, University of Turku, Turku, CORPORATE SOURCE: FIN-20014, Finland Journal of Organic Chemistry (2002), 67(23), 7995-8001 SOURCE: CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 138:24924 OTHER SOURCE(S): Synthetic glycoclusters are extensively used as mimetics of naturally occurring, multivalent carbohydrate ligands in various glycobiol. applications. Their preparation, however, is far from trivial, and it still is a limiting factor in the study of carbohydrate binding. The authors herein report the synthesis of an orthogonally protected building block, N-Alloc-N'-Boc-N''-Fmoc- α , α -bis (aminomethyl)- β -alanine (I), and its use in the preparation of triantennary peptide glycoclusters on a solid support. The assembly of the clusters involves removal of the amino protections of the solid-supported branching unit I in the order Fmoc, Boc, and Alloc, and subsequent coupling of peracetylated O-(glycopyranosyl)-N-Fmoc-L-serine pentafluorophenyl esters (D-galactose, D-glucose, D-mannose, and D-ribose) to each exposed amino group. 152389-14-5P 243469-45-6P 478062-63-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of an orthogonally protected bis(aminomethyl)-β-alanine building block for the solid-phase construction of glycoconjugates) 478062-65-6P 478062-66-7P 478062-67-8P IT 478062-68-9P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of an orthogonally protected bis(aminomethyl)- β -alanine building block for the solid-phase construction of glycoconjugates) THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L101 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 12 Apr 2001 ACCESSION NUMBER: 2001:259282 CAPLUS DOCUMENT NUMBER: 135:19843 Application of novel, N-DTPM protected D-glucosamine TITLE: building blocks in oligosaccharide synthesis AUTHOR(S): Singh, L.; Seifert, J. 3 Hi-Tech Court, Brisbane Technology Park, Alchemia CORPORATE SOURCE: Pty Ltd., Eight Mile Plains, 4113, Australia Tetrahedron Letters (2001), 42(17), 3133-3136 SOURCE: CODEN: TELEAY; ISSN: 0040-4039 Elsevier Science Ltd. PUBLISHER: DOCUMENT TYPE: Journal English LANGUAGE: CASREACT 135:19843 OTHER SOURCE(S): A study of glycosylation reactions was performed, using novel N-DTPM protected glucosamine donors and acceptors ranging from achiral primary

Shears

571-272-2528

Searcher :

alcs. to various alcs. within the D-GlcNAc-, D-Gal- and D-Glu-series. The results show high yielding reactions with good β -selectivities.

342640-48-6P 342640-49-7P 342640-50-0P IT

342640-51-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of oligosaccharides via regioselective glycosylation of novel N-DTPM protected D-glucosamine building

blocks)

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 28 Feb 2001

2001:143892 CAPLUS ACCESSION NUMBER:

134:237716 DOCUMENT NUMBER:

Automated solid-phase synthesis of oligosaccharides TITLE: AUTHOR (S):

Plante, Obadiah J.; Palmacci, Emma R.; Seeberger,

Peter H.

CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of

Technology, Cambridge, MA, 02139, USA

SOURCE: Science (Washington, DC, United States) (2001),

291(5508), 1523-1527

CODEN: SCIEAS; ISSN: 0036-8075

American Association for the Advancement of Science PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

OTHER SOURCE(S): CASREACT 134:237716

Traditionally, access to structurally defined complex carbohydrates has been very laborious. Although recent advancements in solid-phase synthesis have made the construction of complex oligosaccharides less tedious, a high level of tech. expertise is still necessary to obtain the desired structures. We describe the automated chemical synthesis of several oligosaccharides on a solid-phase synthesizer. A branched dodecasaccharide was synthesized through the use of glycosyl phosphate building blocks and an octenediol functionalized resin. The target oligosaccharide was readily obtained after cleavage from the solid support. Access to certain complex oligosaccharides now has become feasible in a fashion much like the construction of oligopeptides and oligonucleotides.

330457-52-8P 330457-55-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of branched oligosaccharides using solid-phase synthesis methods using glycosyl phosphate building blocks)

IT 253683-35-1P 253683-36-2P 254442-16-5DP,

resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of branched oligosaccharides using solid-phase synthesis methods using glycosyl phosphate building

blocks)

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN ED Entered STN: 19 Oct 2000

Searcher : 571-272-2528 Shears

ACCESSION NUMBER:

2000:737828 CAPLUS

DOCUMENT NUMBER:

134:17644

TITLE:

New phenyl 6,4'-substituted-1-thio-β-maltosides, building blocks for the synthesis of linear and

branched malto-oligosaccharides

AUTHOR (S):

Motawia, Mohammed Saddik; Larsen, Kim; Olsen, Carl

Erik; Moller, Birger Lindberg

CORPORATE SOURCE:

Plant Biochemistry Laboratory, Department of Plant

Biology, The Royal Veterinary and Agricultural

University, Copenhagen, DK-1871, Den. Synthesis (2000), (11), 1547-1556

SOURCE:

CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER:

Georg Thieme Verlag

DOCUMENT TYPE:

Journal English

LANGUAGE:

CASREACT 134:17644 OTHER SOURCE(S):

An efficient strategy to synthesize a number of new phenylthio-maltoside derivs. in yields from 55 to 95% is described. These derivs. can be used as suitable building blocks for stepwise synthesis of starch derived malto-oligosaccharides.

5346-81-6P 244286-77-9P 250335-04-7P 259742-11-5P 309913-14-2P 309913-15-3P 309913-16-4P 309913-20-0P 309913-21-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation of new Ph-substituted-thio-β-maltosides, building blocks for the synthesis of linear and branched malto-

oligosaccharides)

250335-03-6P 309913-17-5P 309913-18-6P IT

309913-19-7P 309913-22-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of new Ph-substituted-thio-β-maltosides, building

blocks for the synthesis of linear and branched malto-

oligosaccharides)

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L101 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

41

Entered STN: 21 Jul 2000

ACCESSION NUMBER:

2000:493559 CAPLUS

DOCUMENT NUMBER:

133:105256

TITLE:

Protecting groups for monosaccharides as universal

building blocks for oligosaccharide synthesis

INVENTOR(S):

Papageorgiou, John; Dekany, Gyula; Bornaghi, Laurent Applicant

Francois

PATENT ASSIGNEE(S):

Alchemia Pty. Ltd., Australia

SOURCE:

PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE ______ ____ 20,000118 20000720 WO 2000-AU25 WO 2000042057 A1

Searcher :

Shears

571-272-2528

```
AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2360069
                                20000720
                          AA
                                            CA 2000-2360069
                                                                    20000118
    EP 1144430
                          A1
                                20011017
                                            EP 2000-902502
                                                                    20000118
             AT, BE, CH, DE, DK, ES; FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         R:
             IE, SI, LT, LV, FI, RO
     JP 2002538085
                          Т2
                                20021112
                                             JP 2000-593624
                                                                    20000118
    AU 771708
                          B2
                                20040401
                                            AU 2000-24252
                                                                    20000118
PRIORITY APPLN. INFO.:
                                            AU 1999-8230
                                                                    19990118
                                             WO 2000-AU25
                                                                 W
                                                                    20000118
OTHER SOURCE(S):
                         MARPAT 133:105256
GΙ
```

- AB The invention provides collections of orthogonally-protected monosaccharides as universal building blocks for the synthesis of glycoconjugates of non-carbohydrate mols., neo-glycoconjugates, and oligosaccharides. This orthogonal protection strategy allows for the specific deprotection of any substituent on the saccharide ring, and greatly facilitates targeted or library-focused carbohydrate-related syntheses. In particular, the invention provides a universal monosaccharide building block I and II in which A is a leaving group; X is hydrogen, O, N or N3; X1 is hydrogen, CH2O, CH2NH, CH3, CH2N3 or COO; and B, C, D and E are protecting groups that can be cleaved orthogonally, and in which B, C, D and E are absent when X is hydrogen or N3, and E is absent when X1 is hydrogen, CH3 or N3. Thus, Me 6-0-(tbutyldiphenylsilyl)-3-0-(p-chlorobenzoyl)-2-deoxy-2-[1-(4,4-dimethyl-2,6dioxocyclohex-1-ylidene) ethylamino]-4-O-tetrahydropyranyl-1-thio-β-Dglucopyranoside was prepared as a building block for oligosaccharide synthesis.
- IT 151072-06-9P 282526-21-0P 282526-22-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)
 (protecting groups for monosaccharides as universal building blocks for oligosaccharide synthesis)
- IT 282526-23-2P

 RL: SPN (Synthetic preparation); PREP (Preparation)

 (protecting groups for monosaccharides as universal building

```
blocks for oligosaccharide synthesis)
 REFERENCE COUNT:
                                THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
                          1.8
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L101 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
    Entered STN:
                    15 Jul 1998
ACCESSION NUMBER:
                          1998:431211 CAPLUS
DOCUMENT NUMBER:
                          129:189556
TITLE:
                          Assembly of Oligosaccharide Libraries with a Designed
                          Building Block and an Efficient Orthogonal
                          Protection-Deprotection Strategy
AUTHOR (S):
                          Wong, Chi-Huey; Ye, Xin-Shan; Zhang, Zhiyuan
CORPORATE SOURCE:
                          Department of Chemistry and The Skaggs Institute for
                          Chemical Biology, Scripps Research Institute, La
                          Jolla, CA, 92037, USA
                          Journal of the American Chemical Society (1998),
SOURCE:
                          120(28), 7137-7138
                          CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:
                         American Chemical Society
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                         English
     Synthesis of oligosaccharides using building blocks containing four
     selectively removable protecting groups as acceptors for glycosidation.
     The four protecting groups are chloroacetyl, p-methoxybenzyl, levulinyl,
     and tert-butyldiphenylsilyl.
     211801-53-5P 211801-55-7P 211801-56-8P
     211801-58-0P 211801-64-8P 211801-65-9P
     211801-69-3P 211801-72-8P 211801-73-9P
     211801-74-0P 211801-75-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (assembly of oligosaccharide libraries with a designed
        building block and an efficient orthogonal
        protection-deprotection strategy)
     211801-59-1P 211801-62-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (assembly of oligosaccharide libraries with a designed
        building block and an efficient orthogonal
        protection-deprotection strategy)
     211800-85-0P 211800-88-3P 211800-92-9P
IT
     211800-93-0P 211800-94-1P 211800-95-2P
    211800-96-3P 211800-97-4P 211800-98-5P
    211800-99-6P 211801-00-2P 211801-03-5P
    211801-06-8P 211801-07-9P 211801-08-0P
    211801-11-5P 211801-12-6P 211801-22-8P
    211801-29-5P 211801-31-9P 211801-33-1P
    211801-35-3P 211801-38-6P 211801-41-1P
    211801-43-3P 211801-44-4P 211801-45-5P
    211801-46-6P 211801-47-7P 211802-00-5P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (synthesis of oligosaccharides using building
       blocks containing four selectively removable protecting groups as
       acceptors for glycosidation)
REFERENCE COUNT:
                               THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

```
L101 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
     Entered STN: 05 Jan 1998
ACCESSION NUMBER:
                         1998:2314
                                    CAPLUS
DOCUMENT NUMBER:
                         128:61693
                         Synthesis of 1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-
TITLE:
                         \alpha-D-glucopyranoside as a building block
                         Kitahara, Haruo; Watanabe, Akira; Togawa, Kazuhiro
AUTHOR(S):
                         Dep. Natural Sci., Fac. Education, Hirosaki Univ.,
CORPORATE SOURCE:
                         Hirosaki, Japan
                         Science Reports of the Hirosaki University (1997),
SOURCE:
                          44(1), 65-68
                         CODEN: HUSRAK; ISSN: 0367-6439
                         Hirosaki University, Faculty of Science
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Synthetic routes are described for a new protecting glucopyranoside,
     1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-\alpha-D-glucopyranoside. This
     compound was synthesized via six steps and may be interesting as a building
     block for the synthesis of oligosaccharides.
     69127-37-3P 200346-85-6P 200346-87-8P
     200346-88-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (preparation of
1,2,3,4-tetra-O-(4-methoxyphenylmethyl)-D-glucopyranoside as
        an oligosaccharide building block)
                               THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         11
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L101 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
     Entered STN: 04 Oct 1997
                          1997:632616 CAPLUS
ACCESSION NUMBER:
                         127:262935
DOCUMENT NUMBER:
                         A simple access to lactose-derived building blocks
TITLE:
                          required in glycoconjugate synthesis
                          Lay, Luigi; Windmuller, Rainer; Reinhardt, Stefan;
AUTHOR(S):
                          Schmidt, Richard R.
                          Fakultat Chemie, Univ. Konstanz, Konstanz, D-78434,
CORPORATE SOURCE:
                          Germany
                         Carbohydrate Research (1997), 303(1), 39-49
SOURCE:
                          CODEN: CRBRAT; ISSN: 0008-6215
                         Elsevier
PUBLISHER:
                          Journal
DOCUMENT TYPE:
                         English
LANGUAGE:
     Lactose was readily transformed into thexyldimethylsilyl
     (3,4-0-isopropylidene-\beta-D-galactopyranosyl)-(1\rightarrow4)-\beta-D-
     glucopyranoside; this compound served as intermediate for the generation of
     partially O-protected lactose building blocks required in oligosaccharide
     and glycoconjugate synthesis. Thus, via per-0-benzoylation, desilylation,
     trichloroacetimidate formation, glycosylation of the Lemieux spacer, and
     acid-catalyzed de-O-isopropylidenation methoxycarbonyloctyl
     (2,6-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-2,3,6-tri-0-
     benzoyl-β-D-glucopyranoside was obtained. Regioselective
     benzoylation with benzoyl cyanide under various conditions afforded 3-0-,
     2,3,2'-0-, 3,2'-0-, and 2,2'-0-unprotected lactoside, resp.
     De-O-isopropylidenation of the 3,2'-O-unprotected lactoside gave
```

the xyldimethylsilyl (6-0-benzoyl- β -D-galactopyranosyl)-(1 \rightarrow 4)-2,6-di-O-benzoyl-β-D-glucopyranoside, an important 2',3',4'-0-unprotected lactose derivative Fucosylation of the 3-0-unprotected lactoside and then de-O-isopropylidenation afforded thexyldimethylsilyl $(2,6-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl-\beta-D-galactopyranosyl)-(1\rightarrow4)-((3,4-di-0-benzoyl$ acetyl-2-0-benzoyl- α -L-fucopyranosyl)-(1 \rightarrow 3)]-2,6-di-0-benzoylβ-D-glucopyranoside, an important fucosyllactose building block. 160720-83-2P 191034-33-0P IT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of lactose-derived building blocks required in glycoconjugate synthesis) IT 160720-73-0P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of lactose-derived building blocks required in glycoconjugate synthesis) THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 32 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L101 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 22 Feb 1997 1997:123442 CAPLUS ACCESSION NUMBER: 126:238580 DOCUMENT NUMBER: Glycosyl azides as building blocks in convergent TITLE: syntheses of oligomeric lactosamine and Lewisx saccharides Broeder, Wolfgang; Kunz, Horst AUTHOR(S): Institut fur Organische Chemie, Johannes CORPORATE SOURCE: Gutenberg-Universitat Mainz, Mainz, D-55128, Germany Bioorganic & Medicinal Chemistry (1997), 5(1), 1-19 SOURCE: CODEN: BMECEP; ISSN: 0968-0896 Elsevier PUBLISHER: Journal DOCUMENT TYPE: English LANGUAGE: Oligosaccharides containing type 2 lactosamine repeating units, e.g. neo-lacto-octaose and trimeric Lewisx derivs., are constructed using neo-lactosamine azide building blocks. The azido group provides a favorable protection of the anomeric position which is stable to versatile protecting group manipulations and glycosylation reactions. On the other hand, glycosyl azides can be converted into glycosyl fluorides via a 1,3-dipolar cycloaddn. with di-tert-butyl-acetylenedicarboxylate and subsequent treatment of the resulting N-glycosyl triazoles with hydrogen fluoride-pyridine complex. Activation of the lactosamine fluorides with Lewis acids affords the possibility to extend the oligosaccharide chain with disaccharide units. Suitable protecting group combinations within the galactose and the glucosamine portion of the lactosamine unit enable selective deprotection reactions and, subsequently, chain extension or branching, e.g. to yield Lewisx structures. 188398-91-6P 188399-12-4P 188399-13-5P IT188399-14-6P 188399-15-7P 188399-18-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (glycosyl azides as building blocks in convergent syntheses of oligomeric lactosamine and Lewis x oligosaccharides)

·IT 188398-92-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (glycosyl azides as building blocks in convergent syntheses of oligomeric lactosamine and Lewis x

oligosaccharides)

REFERENCE COUNT:

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'REGISTRY' ENTERED AT 12:00:49 ON 08 NOV 2004 91 SEA FILE=REGISTRY ABB=ON PLU=ON (151072-06-9/BI OR 152389-14-L102 5/BI OR 160720-73-0/BI OR 160720-83-2/BI OR 188398-91-6/BI OR 188398-92-7/BI OR 188399-12-4/BI OR 188399-13-5/BI OR 188399-14 -6/BI OR 188399-15-7/BI OR 188399-18-0/BI OR 191034-33-0/BI OR 200346-85-6/BI OR 200346-87-8/BI OR 200346-88-9/BI OR 211800-85 -0/BI OR 211800-88-3/BI OR 211800-92-9/BI OR 211800-93-0/BI OR 211800-94-1/BI OR 211800-95-2/BI OR 211800-96-3/BI OR 211800-97 -4/BI OR 211800-98-5/BI OR 211800-99-6/BI OR 211801-00-2/BI OR 211801-03-5/BI OR 211801-06-8/BI OR 211801-07-9/BI OR 211801-08 -0/BI OR 211801-11-5/BI OR 211801-12-6/BI OR 211801-22-8/BI OR 211801-29-5/BI OR 211801-31-9/BI OR 211801-33-1/BI OR 211801-35 -3/BI OR 211801-38-6/BI OR 211801-41-1/BI OR 211801-43-3/BI OR 211801-44-4/BI OR 211801-45-5/BI OR 211801-46-6/BI OR 211801-47 -7/BI OR 211801-53-5/BI OR 211801-55-7/BI OR 211801-56-8/BI OR 211801-58-0/BI OR 211801-59-1/BI OR 211801-62-6/BI OR 211801-64 -8/BI OR 211801-65-9/BI OR 211801-69-3/BI OR 211801-72-8/BI OR 211801-73-9/BI OR 211801-74-0/BI OR 211801-75-1/BI OR 211802-00 -5/BI OR 243469-45-6/BI OR 244286-77-9/BI OR 250335-03-6/BI OR 250335-04-7/BI OR 253683-35-1/BI OR 253683-36-2/BI OR 254442-16 -5/BI OR 259742-11-5/BI OR 282526-21-0/BI OR 282526-22-1/BI OR 282526-23-2/BI OR 309913-14-2/BI OR 309913-15-3/BI OR 309913-16 -4/BI OR 309913-17-5/BI OR 309913-18-6/BI OR 309913-19-7/BI OR 309913-20-0/BI OR 309913-21-1/BI OR 309913-22-2/BI OR 330457-52 -8/BI OR 330457-55-1/BI OR 342640-48-6/BI OR 342640-49-7/BI OR 342640-50-0/BI OR 342640-51-1/BI OR 478062-63-4/BI OR 478062-65 -6/BI OR 478062-66-7/BI OR 478062-67-8/BI OR 478062-68-9/BI OR 5346-81-6/BI OR 69127-37-3/BI)

=> d 1,6,10,12,21,24,26,28,30,31-33,65,75,78,79,84,86,88-91 ide can

L102 ANSWER 1 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

478062-68-9 REGISTRY

Glycinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-0-(2,3,4,6-tetra-0-CN acetyl-β-D-galactopyranosyl)-L-seryl-2-[[[(2S)-2-[[(9H-fluoren-9ylmethoxy) carbonyl] amino] -1-oxo-3-[(2,3,4,6-tetra-0-acetyl- β -Dglucopyranosyl)oxy]propyl]amino]methyl]-2-[[[(25)-2-[[(9H-fluoren-9ylmethoxy) carbonyl] amino] $-1-oxo-3-[(2,3,4-tri-0-acetyl-\beta-D-acetyl-3$ ribopyranosyl)oxy]propyl]amino]methyl]- β -alanyl- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C100 H112 N8 O39 MF

SR CA

CA, CAPLUS, CASREACT STN Files: LC DT.CA CAplus document type: Journal

Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

571-272-2528 Searcher : Shears

PAGE 1-A

PAGE 1-B

Searcher : Shears

571-272-2528

PAGE 2-B

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:24924

L102 ANSWER 6 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

342640-51-1 REGISTRY

 α -D-Galactopyranoside, methyl 3-0-[3,4,6-tri-0-acetyl-2-deoxy-2-[[(tetrahydro-1,3-dimethyl-2,4,6-trioxo-5(2H) $pyrimidinylidene) \\ methyl] \\ amino] \\ -\beta - D - glucopyranosyl] \\ -, \\ 2, 6 - dibenzoate$ (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C40 H45 N3 O18

SR

LC STN Files: CA, CAPLUS, CASREACT DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:19843

L102 ANSWER 10 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 330457-55-1 REGISTRY

CN α -D-Mannopyranoside, 4-pentenyl O-2-O-(2,2-dimethyl-1-oxopropyl)-3,4,6-tris-O-(phenylmethyl)- β -D-galactopyranosyl-(1 \rightarrow 4)-O-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-3,6-bis-O-(phenylmethyl)- β -D-glucopyranosyl-(1 \rightarrow 2)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C92 H99 N O18

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:271086

REFERENCE 2: 136:184053

REFERENCE 3: 134:237716

L102 ANSWER 12 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 309913-22-2 REGISTRY

β-D-Glucopyranoside, phenyl 2,3-bis-O-(phenylmethyl)-1-thio-4-O[2,3,6-tris-O-(phenylmethyl)-α-D-glucopyranosyl]-, 6-(chloroacetate)
(9CI) (CA INDEX NAME)

571-272-2528

Searcher : Shears

FS STEREOSEARCH

MF C55 H57 Cl O11 S

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

L102 ANSWER 21 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 282526-23-2 REGISTRY

CN β-D-Galactopyranoside, methyl 6-O-[(1,1-dimethylethyl)diphenylsilyl]2-O-[(4-methoxyphenyl)methyl]-3-O-2-propenyl-1-thio-, acetate (9CI) (CA
INDEX NAME)

FS STEREOSEARCH

MF C36 H46 O7 S Si

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:105256

L102 ANSWER 24 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 259742-11-5 REGISTRY

CN β -D-Glucopyranoside, phenyl 4-O-[2,3-bis-O-(phenylmethyl)-4,6-O-[(R)-

phenylmethylene] $-\alpha$ -D-glucopyranosyl] -6-O-[(1,1-

dimethylethyl)diphenylsilyl]-2,3-bis-O-(phenylmethyl)-1-thio- (9CI) (CA

INDEX NAME)

FS STEREOSEARCH

MF C69 H72 O10 S Si

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:73438

REFERENCE 2: 134:17644

REFERENCE 3: 132:194574

L102 ANSWER 26 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN RN 253683-36-2 REGISTRY

```
CN
      α-D-Mannopyranoside, 4-pentenyl 0-2-0-acetyl-3,4,6-tris-0-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-O-3,4,6-tris-O-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-O-3,4,6-tris-O-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-O-3,4,6-tris-O-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-O-3, 4, 6-tris-O-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-O-3,4,6-tris-O-
      (phenylmethyl) -\alpha-D-mannopyranosyl-(1\rightarrow 2)-3,4,6-tris-O-
      (phenylmethyl) - (9CI) (CA INDEX NAME)
      STEREOSEARCH
MF
     C196 H208 O37
SR
     CA
                     CA, CAPLUS, CASREACT
LC
     STN Files:
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation)
```

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PAGE 3-A

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:271086

REFERENCE 2: 134:237716

REFERENCE 3: 132:93556

L102 ANSWER 28 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN RN 250335-04-7 REGISTRY

CN β-D-Glucopyranoside, phenyl 2,3,6-tris-O-(phenylmethyl)-1-thio-4-O[2,3,6-tris-O-(phenylmethyl)-α-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH
MF C60 H62 O10 S

SR CA

LC STN Files: CA, CAPLUS, CASREACT DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

REFERENCE 2: 132:35963

L102 ANSWER 30 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 244286-77-9 REGISTRY

CN β -D-Glucopyranoside, phenyl 4-0-[2,3-bis-0-(phenylmethyl)-4,6-0-(R)-phenylmethylene]- α -D-glucopyranosyl]-2,3,6-tris-0-(phenylmethyl)-1-thio-(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C60 H60 O10 S

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:17644

REFERENCE 2: 131:243478

L102 ANSWER 31 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 243469-45-6 REGISTRY

CN L-Serine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-O-(2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C38 H34 F5 N O14

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE /1: 138:24924

REFERENCE 2: 133:223015

REFERENCE 3: 131:214543

L102 ANSWER 32 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 211802-00-5 REGISTRY

CN Hexanoic acid, $6-[[0-\alpha-D-galactopyranosyl-(1\rightarrow3)-0-[\beta-L-galactopyranosyl-(1\rightarrow2)]-6-0-[(1,1-dimethylethyl)diphenylsilyl]-4-0-(1,4-dioxopentyl)-<math>\beta$ -D-galactopyranosyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C46 H68 O20 Si

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

но

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 33 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 211801-75-1 REGISTRY

CN β-D-Galactopyranoside, 4-methylphenyl 4,6-bis-O-[(1,1-dimethylethyl)diphenylsilyl]-3-O-[(4-methoxyphenyl)methyl]-1-thio-, chloroacetate (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C55 H63 Cl O7 S Si2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 65 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 211800-99-6 REGISTRY

CN Hexanoic acid, 6-[[O-2-azido-2-deoxy- α -D-galactopyranosyl-

 $(1\rightarrow3)-0-[\alpha-D-mannopyranosyl-(1\rightarrow2)]-6-0-[(1,1-$

dimethylethyl)diphenylsilyl]-4-0-(1,4-dioxopentyl)-β-D-

galactopyranosyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C46 H67 N3 O19 Si

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

но

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:189556

L102 ANSWER 75 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN 200346-88-9 REGISTRY RN D-Glucopyranoside, (4-methoxyphenyl)methyl 2,3,4-tris-0-[(4-CN methoxyphenyl)methyl]-6-0-(triphenylmethyl)- (9CI) (CA INDEX NAME) FS STEREOSEARCH MF C57 H58 O10 SR CA CA, CAPLUS, CASREACT STN Files: DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:166989

2: 128:61693 REFERENCE

L102 ANSWER 78 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

191034-33-0 REGISTRY

Nonanoic acid, 9-[[2,3,6-tri-O-benzoyl-4-O-[2,6-di-O-benzoyl-3,4-O-(1-CN ' $methylethylidene) - \beta - D - galactopyranosyl] - \beta - D - glucopyranosyl] \circ xy] - \beta - D - galactopyranosyl] - \beta - D - galactopyranosyll] -$, methyl ester (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C60 H64 O18 MF

SR

LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL DT.CA CAplus document type: Journal; Patent

Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:311100

REFERENCE 2: 137:6354

REFERENCE 3: 130:168603

REFERENCE 4: 127:262935

REFERENCE 5: 127:50946

L102 ANSWER 79 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 188399-18-0 REGISTRY

CN β -D-Glucopyranoside, phenylmethyl 0-2,3,4,6-tetra-0-acetyl- β -D-galactopyranosyl- $(1\rightarrow4)$ -0-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-0-(phenylmethyl)- β -D-glucopyranosyl- $(1\rightarrow3)$ -0-2,4,6-tris-0-(phenylmethyl)- β -D-galactopyranosyl- $(1\rightarrow4)$ -0-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-0-(phenylmethyl)- β -D-galactopyranosyl- $(1\rightarrow3)$ -0-2,4,6-tris-0-(phenylmethyl)- β -D-galactopyranosyl- $(1\rightarrow4)$ -0-2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-6-0-(phenylmethyl)- β -D-galactopyranosyl- $(1\rightarrow3)$ -0-2,4,6-tris-0-(phenylmethyl)- β -D-galactopyranosyl- $(1\rightarrow4)$ -2,3,6-tris-0-(phenylmethyl)-(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C192 H195 N3 O48

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-A

PAGE 2-A

PAGE 3-A

Searcher :

Shears

571-272-2528

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:238580

L102 ANSWER 84 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN RN 188398-92-7 REGISTRY β -D-Glucopyranoside, phenylmethyl 0-6-deoxy-2,3,4-tris-0-(phenylmethyl) $-\alpha$ -L-galactopyranosyl- $(1\rightarrow 2)$ -O-3,4,6-tris-O-(phenylmethyl) $-\beta$ -D-galactopyranosyl-(1 \rightarrow 4) -O-2-deoxy-2-(1,3dihydro-1, 3-dioxo-2H-isoindol-2-yl)-3, 6-bis-0-(phenylmethyl)-β-Dglucopyranosyl- $(1\rightarrow 3)$ -O-2,4,6-tris-O-(phenylmethyl)- β -Dgalactopyranosyl-(1→4)-2,3,6-tris-0-(phenylmethyl)- (9CI) (CA INDEX NAME) STEREOSEARCH FS MF C143 H145 N O26 SR STN Files: CA, CAPLUS LC DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 126:238580

L102 ANSWER 86 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 160720-83-2 REGISTRY

CN D-Glucopyranose, 4-0-[2,6-di-0-benzoyl-3,4-0-(1-methylethylidene)-β-D-galactopyranosyl]-, 2,3,6-tribenzoate 1-(2,2,2-trichloroethanimidate) (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C52 H46 Cl3 N O16

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Searcher : S

Shears

571-272-2528

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:50181

REFERENCE 2: 127:262935

REFERENCE 3: 122:106326

L102 ANSWER 88 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 152389-14-5 REGISTRY

CN L-Serine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-0-(2,3,4,6-tetra-0-acetyl-α-D-mannopyranosyl)-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C38 H34 F5 N O14

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:24924

REFERENCE 2: 134:296073

REFERENCE 3: 120:77621

L102 ANSWER 89 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN 151072-06-9 REGISTRY CN 1-thio- (9CI) (CA INDEX NAME) FS STEREOSEARCH MF C23 H32 O5 S Si SR CA, CAPLUS, CASREACT LC STN Files: DT.CA CAplus document type: Journal; Patent Roles from patents: PREP (Preparation); RACT (Reactant or reagent) RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent) Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:33628

REFERENCE 2: 133:105256

REFERENCE 3: 131:228893

REFERENCE 4: 119:250313

L102 ANSWER 90 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 69127-37-3 REGISTRY

CN D-Glucopyranosyl bromide, tetraacetate (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2,3,4,6-Tetra-O-acetyl-D-glucopyranosyl bromide

CN D-Glucosyl bromide, tetraacetate

CN Glucopyranosyl bromide, tetraacetate

FS STEREOSEARCH

DR 102339-89-9, 80513-25-3

MF C14 H19 Br O9

LC STN Files: BEILSTEIN*, BIOBUSINESS, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);

PROC (Process); RACT (Reactant or reagent); NORL (No role in record)
Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

91 REFERENCES IN FILE CA (1907 TO DATE) 91 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:38808

REFERENCE 2: 140:219548

REFERENCE 3: 140:27827

REFERENCE 4: 139:381519

REFERENCE 5: 139:365141

REFERENCE 6: 138:122769

REFERENCE 7: 137:6325

REFERENCE 8: 136:263350

REFERENCE 9: 135:371903

REFERENCE 10: 135:362368

L102 ANSWER 91 OF 91 REGISTRY COPYRIGHT 2004 ACS on STN

RN 5346-81-6 REGISTRY

CN β -D-Glucopyranoside, phenyl 4-O-(2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl)-1-thio-, triacetate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glucopyranoside, phenyl 4-0- α -D-glucopyranosyl-1-thio-, heptaacetate, β -D- (8CI)

OTHER NAMES:

CN NSC 232027

FS STEREOSEARCH

MF C32 H40 O17 S

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL (*File contains numerically searchable property data)

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)
Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:391419

REFERENCE 2: 138:287940

REFERENCE 3: 138:73438

REFERENCE 4: 134:17644

REFERENCE 5: 132:194574

REFERENCE 6: 125:276325

REFERENCE 7: 125:9849

REFERENCE 8: 115:256489

REFERENCE 9: 109:55099

REFERENCE 10: 101:146746

FILE 'CAOLD' ENTERED AT 12:02:54 ON 08 NOV 2004

L103 8 S L102

L103 ANSWER 1 OF 8 CAOLD COPYRIGHT 2004 ACS on STN

AN CA55:20967c CAOLD

TI S-oxides of sugar thioacetals and a new glucoside synthesis

AU Kuhn, Richard; Baschang-Bister, W.

IT 962-53-8 3055-46-7 5517-54-4 38178-46-0 51023-63-3 89886-06-6

89886-08-8 93302-26-2 100016-91-9 102339-89-9 109428-47-9

112484-74-9 112716-08-2 113091-51-3 113114-28-6 113114-78-6 114889-92-8

115799-07-0 115799-08-1 115799-09-2

L103 ANSWER 2 OF 8 CAOLD COPYRIGHT 2004 ACS on STN

```
CA54:12003c CAOLD
AN
     preparation of monomeric fructose nitrates
ΤI
     Sarel-Imber, Meira; Leibowitz, J.
AU
     102339-89-9 108489-40-3 114510-21-3 115799-10-5 117608-65-8
ΙT
     120746-71-6
L103 ANSWER 3 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA54:1328f CAOLD
AN
     action of dimethyl sulfoxide in O-acetylglycosyl bromides
TТ
     Srivastava, Harris C.
ΑU
     3068-31-3 13007-37-9 55018-54-7 102339-89-9
TΤ
L103 ANSWER 4 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA53:21677g CAOLD
AN
     synthesis of 3-O-\alpha-D-glucopyranosyl-D-glucose sakeboise or nigeroseu
ΤI
     - (I) reaction of 1,2,5,6-di-O-isopropylidene-D-glucofuranose and
     2,3,4,6-tetra-0-acetyl-\alpha-D-glucopyranosyl bromide
AU Matsuda, Kazuo; Sekiguchi, T.
ΤT
     102339-89-9
L103 ANSWER 5 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA53:6092e CAOLD
AN
     preparation of acetobromo sugars
TI
     Weygand, Friedrich; Ziemann, H.; Bestmann, H. J.
ΑU
     5160-12-3 7505-49-9 102129-62-4 102339-89-9 109910-18-1
ΙT
L103 ANSWER 6 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA53:1162f CAOLD
AN
     glucosylation of acetylenes
ΤI
     Zelinski, Robert; Meyer, R. E.
ΑU
     6736-97-6 6738-06-3 79744-06-2 102339-89-9 108844-74-2
IT
     109010-44-8 114421-40-8 116257-27-3 122703-50-8
L103 ANSWER 7 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA52:1072e CAOLD
AN
     reaction of 2,3,4,6-tetraacetyl-\alpha-D-glucopyranosyl bromide with
TI
     mercaptans
     Stanek, Jaroslav; Malkovsky, K.; Novak, M.; Petricek, D.
ΑU
                 6612-63-1 6697-87-6 10343-13-2 30657-67-1 64495-83-6
     6605-39-6
IT
     66108-02-9 70518-88-6 70569-27-6 84534-34-9 93711-40-1
     102339-89-9 119250-07-6
L103 ANSWER 8 OF 8 CAOLD COPYRIGHT 2004 ACS on STN
     CA51:227h CAOLD
     reactivity of the O-acylglycosyl halides - (IV) solvolytic reactions of
TI
     O-acetyl-lpha-D-glycosyl-1-halides in the presence of electrophilic
     catalysts
     Mattok, G. L.; Phillips, G. O.
ΑU
      572-10-1 102339-89-9
TΨ
     FILE 'USPATFULL' ENTERED AT 12:03:15 ON 08 NOV 2004
             17 S L102
L104
L104 ANSWER 1 OF 17 USPATFULL on STN
                         2004:32059 USPATFULL
 ACCESSION NUMBER:
                         Programmable one-pot oligosaccharide synthesis
 TITLE:
```

INVENTOR(S):

Wong, Chi-Huey, Rancho Santa Fe, CA, UNITED STATES

Zhang, Zhiyuan, San Diego, CA, UNITED STATES Ollman, Ian, Foster City, CA, UNITED STATES Baasov, Timor, Haifa, IL, UNITED STATES

Ye, Xin-Shan, Beijing, CHINA

PATENT ASSIGNEE(S):

The Scripps Research Institute, La Jolla, CA, UNITED

STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 2004024201

20040205 A1

APPLICATION INFO.: RELATED APPLN. INFO .:

A1 20030325 (10) US 2003-400090

Continuation of Ser. No. US 2001-762377, filed on 10

Jul 2001, GRANTED, Pat. No. US 6538117 A 371 of International Ser. No. WO 1999-US18151, filed on 10 Aug

1999, PENDING

NUMBER

_____ ___

DATE

PRIORITY INFORMATION:

US 1998-96001P

19980810 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

THE SCRIPPS RESEARCH INSTITUTE, OFFICE OF PATENT

COUNSEL, TPC-8, 10550 NORTH TORREY PINES ROAD, LA

JOLLA, CA, 92037

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

32 Drawing Page(s)

LINE COUNT:

2477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The reactivity of a number of p-methylphenyl thioglycoside (STol) donors which are either fully protected or have one hydroxyl group exposed has been quantitatively determined by HPLC in conjunction with the development of a broadly applicable approach for a facile one-pot synthesis of oligosaccharides. The influence on reactivity of the structural effects of different monosaccharide cores and different protecting groups on each glycoside donor is characterized and quantified. In addition, a correlation between glycosyl donor reactivity and the chemical shift of the anomeric proton by 1 H NMR has been established. A database of thioglycosides as glycosyl donors has been created using this reactivity data. The utility is demonstrated by the easy and rapid one-pot assembly of various linear and branched oligosaccharide structures. In addition, a computer program as been described for use as a database search tool and guide for the selection of building blocks for the one-pot assembly of a desired oligosaccharide or a library of individual oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 2 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2003:294853 USPATFULL

TITLE:

Sulphonamide derivatives as prodrugs of aspartyl

protease inhibitors

INVENTOR(S):

Tung, Roger Dennis, Beverly, MA, UNITED STATES Hale, Michael Robin, Bedford, MA, UNITED STATES Baker, Christopher Todd, Waltham, MA, UNITED STATES

Searcher :

Shears

571-272-2528

Furfine, Eric Steven, Durham, NC, UNITED STATES

Kaldor, Istvan, Durham, NC, UNITED STATES

Kazmierski, Wieslaw Mieczylaw, Raleigh, NC, UNITED

STATES

Spaltenstein, Andrew, Raleigh, NC, UNITED STATES

NUMBER	KIND	DATE
2003207871	A1	20031106

PATENT INFORMATION: APPLICATION INFO.:

US

20030219 (10) US 2003-370171 A1

RELATED APPLN. INFO.:

Division of Ser. No. US 2000-602494, filed on 23 Jun 2000, GRANTED, Pat. No. US 6559137 Continuation of Ser. No. WO 1998-US4595, filed on 9 Mar 1998, PENDING Continuation-in-part of Ser. No. US 1997-998050, filed

on 24 Dec 1997, GRANTED, Pat. No. US 6436989

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, 50TH FLOOR,

NEW YORK, NY, 10020-1105

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

27 1

LINE COUNT:

2045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 3 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2003:201363 USPATFULL

TITLE:

Benzophenone alpha-d-glycopyranosides, preparation and

therapeutic use

INVENTOR(S):

Lebreton, Luc, Dijon, FRANCE

Legendre, Christiane, Velars-sur-Ouche, FRANCE

Samreth, Soth, Daix, FRANCE

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 2003139349 US 2002-168210 WO 2000-FR3420	A1 A1	20030724 20020905 20001206	(10)
	774 2 1 2 4 4 4			

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN,

55402-0903

NUMBER OF CLAIMS:

10 1

Searcher :

EXEMPLARY CLAIM:

Shears

571-272-2528

products. Said novel [4-(4-cyanobenzyl)phenyl] α -D-glycopyranosides are useful in therapy for fighting against atheromatous plaque.

LINE COUNT:

388

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns (i) [4-(4-cyanobenzyl)phenyl]α-D-glycopyranosides of formula (I) wherein: the group α-D-glycopyranosyl R represents a α-D-glycopyranosyl, α-D-galactopyranosyl. α-D-mannopyranosyl, α-D-arabinopyranosyl, α-D-lyxopyranosyl, or α-D-ribopyranosyl group: (ii) their esters resulting from the esterification of at least a OH function of each pyranosyl group with a C.sub.2-C.sub.4 alkanoic or a cycloalkanoic acid, as novel industrial

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 4 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2003:123339 USPATFULL

TITLE:

Sulphonamide derivatives as prodrugs of aspartyl

protease inhibitors

INVENTOR(S):

Tung, Roger Dennis, Beverly, MA, United States Hale, Michael Robin, Bedford, MA, United States Baker, Christopher Todd, Waltham, MA, United States Furfine, Eric Steven, Durham, NC, United States Kaldor, Istvan, Durham, NC, United States

Kazmierski, Wieslaw Mieczylaw, Raleigh, NC, United

States

Spaltenstein, Andrew, Raleigh, NC, United States Vertex Pharmaceuticals Incorporated, Cambridge, MA,

PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE
US 6559137 B1 20030506

PATENT INFORMATION:
APPLICATION INFO:

US 2000-602494 20000623 (9) Continuation of Ser. No. WO 1998-US4595, filed on 9 Mar

RELATED APPLN. INFO.:

1998 Continuation of Ser. No. US 1997-998050, filed on

24 Dec 1997, now patented, Pat. No. US 6436989

DOCUMENT TYPE:

Utility GRANTED

FILE SEGMENT: PRIMARY EXAMINER:

Raymond, Richard L.

LEGAL REPRESENTATIVE:

Haley, Jr., James F., Wang, Min, Fish & Neave

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

41

NUMBER OF DRAWINGS:

AB

0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 2267

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical

Searcher: Shears 571-272-2528

compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 5 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2003:81803 USPATFULL

TITLE:

Programmable one-pot oligosaccharide synthesis Wong, Chi-Huey, Rancho Santa Fe, CA, United States

INVENTOR(S):

Zhang, Zhiyuan, San Diego, CA, United States Ollmann, Ian, Foster City, CA, United States

Baasov, Timor, Haifa, ISRAEL Ye, Xin-Shan, Beijing, CHINA

PATENT ASSIGNEE(S):

The Scripps Research Institute, La Jolla, CA, United

States (U.S. corporation)

	NUMBER KIND DATE
PATENT INFORMATION:	US 6538117 B1 20030325 WO 2000009527 20000224
APPLICATION INFO.:	US 2001-762377 20010710 (9) WO 1999-US18151 19990810
DOCUMENT TYPE: FILE SEGMENT:	Utility GRANTED
PRIMARY EXAMINER: ASSISTANT EXAMINER:	Barts, Samuel Khare, Devesh
LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:	Lewis, Donald G., Fitting, Thomas
EXEMPLARY CLAIM:	3
NUMBER OF DRAWINGS: LINE COUNT:	33 Drawing Figure(s); 32 Drawing Page(s) 2503

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The reactivity of a number of p-methylphenyl thioglycoside (STol) donors which are either fully protected or have one hydroxyl group exposed has been quantitatively determined by HPLC in conjunction with the development of a broadly applicable approach for a facile one-pot synthesis of oligosaccharides. The influence on reactivity of the structural effects of different monosaccharide cores and different protecting groups on each glycoside donor is characterized and quantified. In addition, a correlation between glycosyl donor reactivity and the chemical shift of the anomeric proton by .sup.1H NMR has been established. A database of thioglycosides as glycosyl donors has been created using this reactivity data. The utility is demonstrated by the easy and rapid one-pot assembly of various linear and branched oligosaccharide structures. In addition, a computer program has been described for use as a database search tool and guide for the selection of building blocks for the one-pot assembly of a desired oligosaccharide or a library of individual oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 6 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:332719 USPATFULL

TITLE:

Benzo[b]pyran derivatives useful as external agents for

the skin

INVENTOR(S):

Hattori, Takao, Yokohama, JAPAN Katagiri, Takayuki, Yokohama, JAPAN

Searcher :

Shears

Kitada, Yoshio, Yokohama, JAPAN Yoshida, Takashi, Okayama, JAPAN

Ito, Hideyuki, Okayama, JAPAN

PATENT ASSIGNEE(S):

Pola Chemical Industries Inc., Shizuoka, JAPAN

(non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6495524	B1	20021217	
	WO 9938858		19990805	
APPLICATION INFO.:	US 2000-600617		20001010	(9)
	WO 1999-JP358		19990128	

DATE NUMBER

PRIORITY INFORMATION:

19980128 JP 1998-30578 JP 1998-164350 19980528

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

Barts, Samuel

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Henry, Michael C. Knobbe, Martens, Olson & Bear, LLP

LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT:

669

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

To provide an external agent for thee skin that not only exhibits excellent effects of prevention and amelioration of skin pigmentation but also has no fear of giving adverse influences to the skin and can be used safely, there is added to an external agent for the skin one or more compound(s) selected from compounds represented by formula (I) below: ##STR1##

(wherein R.sub.1, R.sub.2, R.sub.3, R.sub.4, and R.sub.5, independently represent a hydrogen atom or an alkyl group having 1 to 4 carbon atoms; and R represents a hydrogen atom, an acyl group, or a sugar residue).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 7 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:209566 USPATFULL

TITLE: INVENTOR(S):

Prodrugs of aspartyl protease inhibitors Hale, Michael R., Bedford, MA, United States Tung, Roger D., Arlington, MA, United States Baker, Christopher T., Waltham, MA, United States Spaltenstein, Andrew, Raleigh, NC, United States

PATENT ASSIGNEE(S):

Vertex Pharmaceuticals, Incorporated, Cambridge, MA,

United States (U.S. corporation)

Shears

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: FILE SEGMENT:	US 6436989 US 1997-998050 Utility GRANTED	B1	20020820 19971224	(8)

Searcher :

PRIMARY EXAMINER:

Coleman, Brenda

LEGAL REPRESENTATIVE:

Fish & Neave, Haley, Jr., James F., Wang, Min

NUMBER OF CLAIMS:

12

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1628

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to prodrugs of a class of sulfonamides which are aspartyl protease inhibitors. In one embodiment, this invention relates to a novel class of prodrugs of HIV aspartyl protease inhibitors characterized by favorable aqueous solubility, high oral bioavailability and facile in vivo generation of the active ingredient. This invention also relates to pharmaceutical compositions comprising these prodrugs. The prodrugs and pharmaceutical compositions of this invention are particularly well suited for decreasing the pill burden and increasing patient compliance. This invention also relates to methods of treating mammals with these prodrugs and pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 8 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:206618 USPATFULL

TITLE:

INVENTOR(S):

O-aryl glucoside SGLT2 inhibitors and method

Washburn, William N., Titusville, NJ, UNITED STATES

Sher, Philip M., Plainsboro, NJ, UNITED STATES

Wu, Gang, Princeton, NJ, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002111315 US 6683056	A1 B2	20020815 20040127	
APPLICATION INFO.:	US 2001-791512	A1	20010223	(9)

NUMBER	DATE		

PRIORITY INFORMATION:

US 2000-193094P 20000330 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

MARLA J MATHIAS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000

NUMBER OF CLAIMS:

26

EXEMPLARY CLAIM:

1

LINE COUNT:

1753

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

##STR1##

wherein

when Y is ##STR2##

or heteroaryl;

A is --O(CH.sub.2).sub.m, S, --NH(CH.sub.2).sub.m, or (CH.sub.2).sub.n where n is 0-3 and m is 0-2;

Searcher :

Shears

and R.sup.1 to R.sup.6 are as defined herein.

A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with one, two or more other antidiabetic agents, and/or one, two or more hypolipidemic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 9 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:186263 USPATFULL

TITLE:

Processes for the preparation of alphaGal(1-3)betaGal(1-

4)Glc-OR

INVENTOR(S):

Ratcliffe, Murray R., Cochrane, CANADA Gregson, Jonathan M., Calgary, CANADA Kamath, Vivek P., Calgary, CANADA

Yeske, Robert E., Calgary, CANADA

PATENT ASSIGNEE(S):

Synsorb Biotech, Inc., NW Calgary, CANADA (non-U.S.

corporation)

NUMBER DA

DATE

PRIORITY INFORMATION:

US 2000-250190P 20001129 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX

1404, ALEXANDRIA, VA, 22313-1404

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT:

1087

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Disclosed are novel synthetic processes for the preparation of the

trisaccharide $\alpha Gal(1\rightarrow 3)\beta Gal(1\rightarrow 4)Glc-OR$

compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 10 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:164352 USPATFULL

TITLE:

Apparatus and methods for the automated synthesis of

oligosaccharides

INVENTOR (S):

Seeberger, Peter H., Cambridge, MA, UNITED STATES

Plante, Obadiah J., Beverly, MA, UNITED STATES

NUMBER

DATE

Searcher :

Shears

PRIORITY INFORMATION:

US 2000-226169P

20000818 (60)

DOCUMENT TYPE:

US 2000-254233P

20001208 (60)

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

FOLEY, HOAG & ELIOT, LLP, PATENT GROUP, ONE POST OFFICE

SQUARE, BOSTON, MA, 02109

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

22 Drawing Page(s)

LINE COUNT:

1947

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

One aspect of the present invention relates to an apparatus for the efficient synthesis of oligosaccharides on a solid support, e.g., formed by subunit addition to terminal subunits immobilized on solid-phase particles. In certain embodiments, the apparatus of the present invention is used in combinatorial methods, e.g., as described herein, of synthesizing oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 11 OF 17 USPATFULL on STN

ACCESSION NUMBER:

2002:99425 USPATFULL

TITLE:

O-glucosylated benzamide SGLT2 inhibitors and method Washburn, William N., Titusville, NJ, UNITED STATES

INVENTOR(S):

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002052326	A1	20020502	
	US 6555519	B2	20030429	
APPLICATION INFO.:	US 2001-791186	A1	20010223	(9)

NUMBER

PRIORITY INFORMATION:

US 2000-193308P

20000330 (60)

DATE

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MARLA J MATHIAS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000

NUMBER OF CLAIMS: EXEMPLARY CLAIM: . 24

1

LINE COUNT:

1420

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SGLT2 inhibiting compounds are provided having the formula

wherein

n is 0, 1 or 2;

##STR2##

or heteroaryl which may contain 1 to 4 heteroatoms in the ring which may be selected from N, O, S, SO, and/or SO.sub.2, bearing substituents R.sup.3 and R.sup.4;

and R.sup.1 to R.sup.4 are as defined herein.

Searcher :

Shears

A method is also provided for treating diabetes and related diseases employing an SGLT2 inhibiting amount of the above compound alone or in combination with one, two or more other antidiabetic agents and/or one, two or more hypolipidemic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 12 OF 17 USPATFULL on STN

ACCESSION NUMBER:

1999:24630 USPATFULL

TITLE:

Oligosaccharide glycosides having mammalian immunosuppresive and tolerogenic properties

INVENTOR(S):

Srivastava, Om P., Edmonton, Canada Srivastava, Geeta, Edmonton, Canada Szweda, Roman, Edmonton, Canada Bundle, David R., Edmonton, Canada Hindsgaul, Ole, Edmonton, Canada Hanna, H. Rizk, Edmonton, Canada

Holme, Kevin, Alameda, CA, United States Barresi, Frank W., Edmonton, Canada

Du, Minghui, Edmonton, Canada

PATENT ASSIGNEE(S):

Glycomed Incorporated, Alameda, CA, United States (U.S.

corporation)

KIND DATE NUMBER

PATENT INFORMATION:

US 5874411 US 1996-754097 19990223 19961113

APPLICATION INFO.:

DATE NUMBER

PRIORITY INFORMATION:

US 1995-6593P

19951113 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Fonda, Kathleen K.

LEGAL REPRESENTATIVE:

Burns, Doanes, Swecker & Mathis LLP

NUMBER OF CLAIMS:

11

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

54 Drawing Figure(s); 53 Drawing Page(s)

LINE COUNT:

5991

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are novel oligosaccharide glycosides having mammalian AB immunosuppressive and tolerogenic properties, pharmaceutical

compositions containing such oligosaccharide glycosides and to methods of using such oligosaccharide glycosides to modulate cell-mediated

immune responses in a mammal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 13 OF 17 USPATFULL on STN

ACCESSION NUMBER:

1998:92193 USPATFULL

TITLE:

Selectively fluorinated organic compounds

INVENTOR(S):

Chambers, Richard Dickinson, Durham, United Kingdom

Sandford, Graham, Durham, United Kingdom

PATENT ASSIGNEE(S):

British Nuclear Fuels plc, Warrington, England

(non-U.S. corporation)

Searcher :

Shears

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5789580 WO 9603357	19980804 19960208	(0)
APPLICATION INFO.:	US 1996-619498 WO 1995-GB1765	19960425 19950726 19960425	(8) PCT 371 date
,		19960425	PCT 102(e) date
• •	NUMBER	DATE	
PRIORITY INFORMATION: DOCUMENT TYPE:	GB 1994-14974 Utility	19940726	

FILE SEGMENT: PRIMARY EXAMINER: ASSISTANT EXAMINER:

LEGAL REPRESENTATIVE:

Granted Kight, John Lee, Howard C. Sheridan Ross P.C.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT:

18 449

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for the preparation of a selectively fluorinated organic compound, which process includes reaction of a precursor of said organic compound, the precursor containing at least one Group VI element selected from sulfur, selenium and tellurium, with a fluorinating agent and another halogenating agent and characterized in that the

fluorinating agent is elemental fluorine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 14 OF 17 USPATFULL on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

93:46407 USPATFULL

TITLE:

Condensed quinoline system N-glycosides

INVENTOR(S):

Yamato, Masatoshi, Okayama, Japan Hashigaki, Kuniko, Okayama, Japan

Mect Corporation, Tokyo, Japan (non-U.S. corporation)

		NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5	217961	• .	19930608	
APPLICATION INFO.:	US 1	991-759615		19910916	(7)
			1 17	110 1000	15126

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1989-451363, filed on 15

Dec 1989, now abandoned

	NUMBER	DATE
•		
PRIORITY INFORMATION:	JP 1988-330674	19881227
	JP 1989-282208	19891030
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Brown, Johnnie R.	

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: Kunz, Gary L. Oblon, Spivak, McClelland, Maier & Neustadt

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

Searcher :

Shears

LINE COUNT:

1324

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides condensed quinoline compounds represented by the following general formula (I): ##STR1## in which Z is NH, X is hydrogen, L is lower alkoxy, M is NHQ, Q is --SO.sub.2 CH.sub.3, Y is --NHR, and R is: ##STR2## These compounds are effective for inhibiting KB-cell growth and prolongation of the life span of mice implanted with tumor P-388.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 15 OF 17 USPATFULL on STN

ACCESSION NUMBER:

91:73489 USPATFULL

TITLE:

Separation of isomers of furo (3,4-C) pyridine

derivatives

INVENTOR(S):

Esanu, Andre, Paris, France

Eck, Charles, Shrewsbury, MA, United States

PATENT ASSIGNEE(S):

Societe de Conseils de Recherches et d'Applications

Scientifiques (S.C.R.A.S.), France (non-U.S.

corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5047537	19910910	
APPLICATION INFO.:	US 1990-598653	19901018	(7)
	WO 1990-FR228	19900402	
		19901018	PCT 371 date
		19901018	PCT 102(e) date

NUMBER	DATE		
	,		

PRIORITY INFORMATION:

GB 1989-7480

19890403

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Dentz, Bernard

LEGAL REPRESENTATIVE:

Lucas & Just

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

5

1

LINE COUNT:

304

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to a method for the separation of stereoisomers of 7-hydroxy-furo[3,4-c]pyridine derivatives of the formula ##STR1## wherein R.sub.3, R.sub.4 and R.sub.6 represent various substitutents, which comprises reacting a fully 0-acetylated monosaccharide halogenide with a racemate of the selected 7-hydroxy-furo[3,4-c]pyridine derivative, to form the (+) and (-) (O-acetylated monosaccharide) (furo[3,4-c] pyridine 7-yl derivative) ethers, then separating the (+) and the (-) ethers by selective crystallization, in an hydroalcoholic medium, either of the acetylated forms or of the corresponding desacetylated forms and, finally, working up each of the separated derivatives by the usual routes. The compounds are known pharmaceuticals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 16 OF 17 USPATFULL on STN

Searcher :

Shears

ACCESSION NUMBER:

89:67455 USPATFULL

TITLE:

13β-alkylmilbemycin derivatives for controlling

parasites of animals and plants

INVENTOR (S):

Frei, Bruno, Liestal, Switzerland

O'Sullivan, Anthony C., Basel, Switzerland Gehret, Jean-Claude, Aesch, Switzerland

PATENT ASSIGNEE(S):

CIBA-GEIGY Corporation, Ardsley, NY, United States

(U.S. corporation)

NUMBER

KIND DATE

PATENT INFORMATION:

US 4857509

19890815

APPLICATION INFO.:

US 1986-820490

19860117 (6)

CH 1985-278

DATE 19850122

DOCUMENT TYPE:

FILE SEGMENT:

Utility

Granted

PRIMARY EXAMINER:

PRIORITY INFORMATION:

Brown, Johnnie R.

NUMBER

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: Peselev, Elli

NUMBER OF CLAIMS:

Roberts, Edward McC., Findlay, Meredith C.

EXEMPLARY CLAIM:

1,14

LINE COUNT:

1315

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to parasiticidally and insecticidally highly active compounds of formula I ##STR1## wherein R is C.sub.1 -C.sub.10

alkyl;

R.sub.l is hydrogen, a silyl group or a sugar residue; and

R.sub.2 is methyl, ethyl, isopropyl or sec-butyl, and to the preparation

thereof starting from suitably substituted 15-ester or 13β -ester milbemycins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L104 ANSWER 17 OF 17 USPATFULL on STN

ACCESSION NUMBER:

84:56932 USPATFULL

TITLE:

Cyclic polyamino containing compounds having

therapeutic effect and the preparation thereof

INVENTOR(S):

Itokawa, Hideji, Tokyo, Japan

PATENT ASSIGNEE(S):

Tobishi Pharmaceutical Co., Ltd., Tokyo, Japan

(non-U.S. corporation)

NUMBER KIND

PATENT INFORMATION:

US 4476299

19841009

APPLICATION INFO .:

US 1982-401865

19820726 (6)

NUMBER

PRIORITY INFORMATION:

JP 1981-117968 19810728

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

Searcher :

Shears 571-272-2528

CO DANH A

BO CO (2)

A.D=Orthogonal Hydroxy Protecting Groups
D_M=Orthogonal Amino Protecting Group
P=Permanent Protecting Group (Benzoyl)
L=Activating Group

A is a leaving group selected from the group consisting of halogen, trichloroacetimidoyl, sulphoxide, -O-alkenyl; and -SR, where R is alkyl, alkenyl, alkynyl, cycloalkyl or aryl.

 X_1 , X_2 , and X_3 are independently selected from H_1 , O, N_2 , or N_3 , with the provise that only one of X_1 , X_2 , and X_3 is H, N or N_3 in any molecule;

X4 is -CH2O; and

B, C, D and E are different and of them B, C, or D is absent if the corresponding X₁ to X₃ is H or N₃, and B, C, D and/or E are selected from protecting groups which can be cleaved orthogonally in any order, such that the cleavage conditions do not compromise the stability of the other protecting or functional groups on the monosaccharide building block, wherein the protecting groups for hydroxy protection are selected from the group consisting of acyl-type protecting groups, carbonates, t-butyldiphenylsilyl, triisopropylsilyl, trimethylsilylethyl, triphenylsilylethyl, trifluoromethyl, trichloromethyloxycarbonate, ethoxyethyl, cyanocthyl, NSC (p-nitrobenzyl-sulphonylethyloxycarbonyl), p-nitrobenzyl-sulphonylethyl, naphthylmethyl, substituted naphthylmethyl, p-methoxybenzyl, 3,4-dimethoxybenzyl, 2,4,6-trimethoxybenzyl, 3,4-methylenedioxybenzyl, acylamidobenzyl, azidobenzyl, p-azido-m-chlorobenzyl, allylic protecting groups, o-nitrobenzyloxycarbonate, o-

Note: X1-X3 = O and X4 = -CH2O in the above figures.

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Brown, Johnnie R. Peselev, Elli Bucknam and Archer

LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: '

662

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

. New compounds of the following general formula: ##STR1## wherein R.sub.1 is acyl, alkyl, cycloalkyl, carboxyalkyl or ester thereof, heterocyclic group, saccharide residue or hydrogen atom, R.sub.2 stands for hydrogen atom or a lower alkyl and R.sub.3 represents hydrogen atom or a nitrogen-containing group,

are provided, among these, some of the compounds to be isolated and purified from a plant belonging to Genus Rubia, other compounds being prepared by chemically modifying the isolated compounds with various kind of substituents and these new compounds having therapeutic effect, in particular such as antineoplastic, emetic, anorexigenic, psychotropic, vasoconstrictive, papaverinic, antiperkinsonian and/or antidiuretic effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:03:37 ON 08 NOV 2004) L105 0 S L102

FILE 'HOME' ENTERED AT 12:03:49 ON 08 NOV 2004